

In re Application of:

Chien et al.

Application No.: 10/705,791

Filed: November 10, 2003

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Attorney Docket No.: ST-UCSD3230-1

Amendments to the Claims:

Please amend claim 18 and add new claims 36-38, as indicated below in the listing of claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-17. (Cancelled).

18. (Currently Amended) A method for treating a loss of cardiac muscle contractility associated with heart failure comprising:

delivering an expression construct to ~~myocytes~~ cardiomyocytes in a mammalian host suffering from heart failure, wherein the expression construct provides an expressible polynucleotide encoding a phospholamban molecule having a point mutation consisting of S16E, wherein expression of a therapeutic level of the polynucleotide stimulates improved cardiac muscle contractility.

19. (Previously Presented) The method according to claim 18, wherein the expression construct is a viral vector.

20-23. (Cancelled).

24. (Previously Presented) The method according to claim 19, wherein the viral vector is a DNA vector.

25. (Withdrawn). The method as in claim 18, wherein the coding sequence is RNA.

26. (Withdrawn) A method for treatment of heart failure comprising:

delivery of a DNA construct to heart comprising a coding sequence for an antisense phospholamban RNA wherein transcription of the coding sequence is controlled by a promoter functional in heart and the antisense phospholamban RNA increases cardiac contractility or cardiac relaxation.

27. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered using a viral vector.

28. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by injection into the heart.

29. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by direct injection into the heart.

30. (Withdrawn) The method as in claim 26, wherein the coding sequence is delivered by transcatheter injection into the heart.

31. (Withdrawn) The method as in claim 26, wherein the coding sequence is DNA.

32-35. (Cancelled)

36. (New) A method for treating a loss of cardiac muscle contractility associated with heart failure comprising:

delivering, via intracoronary administration, an expression construct to cardiomyocytes in a mammalian host suffering from heart failure, wherein the expression construct provides an expressible polynucleotide encoding a phospholamban molecule having a point mutation consisting of S16E, wherein expression of a therapeutic level of the polynucleotide stimulates improved cardiac muscle contractility.

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37. (New) The method according to claim 36, wherein the expression construct is a viral vector.

38. (New) The method according to claim 37, wherein the viral vector is a DNA vector.